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EXAMINER	
NGUYEN, TRI V	

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/674,888	BEM, JEREMY	
	Examiner	Art Unit	
	Tri V. Nguyen	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43 and 47-86* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43 and 47-86* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In the amendment filed on September 18, 2006, claims 1, 7, 19, 22, 31, 32, 35, 47, 51, 53, 54, 63 and 73-75 have been amended, claims 44-46 have been cancelled and Claims 84-86 have been added. The currently pending claims considered below are Claims 1-43 and 47-86.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5-7, 32, 47, 51-53, 74 and 84-85 are rejected under 35 U.S.C. 102(e) as being anticipated by Weissman et al. (US 6,816,857).

Claim 1: Weissman et al. disclose a method comprising:

a) accepting search query information including a word (col 13, lines 35-65 and Figs 3, 6-8);

b) determining one or more words related to the word included in the accepted search query, wherein at least one of the one or more words determined has a different root than the word (col 13, lines 35-65 and Figs 3, 6-8);

c) automatically generating an ad request including

i) the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8), and

ii) the one or more words determined to be related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8); and

d) retrieving ads using the ad request (col 13, lines 35-65 and Figs 3, 6-8); and

e) transmitting at least some of the retrieved ads towards a client device for rendering to a user (col 13, lines 35-65 and Figs 3, 6-8).

Claim 5: Weissman et al. disclose the method of claim 1 wherein each ad includes keyword targeting criteria, and wherein the act of retrieving ads compares elements of the item request with keyword targeting criteria with at least some of the ads (col 13, lines 35-65; col 14, line 50 to col 15, line 18 and Figs 3, 6-8).

Claim 6: Weissman et al. disclose the method of claim 1 wherein the words include one or more of single words, word segments, phrases, and n-grams (col 13, lines 35-65 and Figs 3, 6-8).

Claim 7: Weissman et al. disclose a method comprising:

a) accepting search query information including a word (col 13, lines 35-65 and Figs 3, 6-8);

b) determining one or more words related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

c) generating an item request including

i) the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8), and

ii) the one or more words determined to be related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

d) retrieving items using the item request (col 13, lines 35-65 and Figs 3, 6-8);

e) determining a score for each of the retrieved items (col 7, lines 41-49; col 13, lines 35-65 and Figs 3, 6-8); and

f) adjusting the scores of any items retrieved on the basis of the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query to generate adjusted scores (col 8, lines 8-22 and col 9, lines 42-67); and

g) serving at least some of the items to a client device for rendering to a user, wherein the serving is controlled, at least in part, using the adjusted scores (col 10, lines 42-54).

Claim 32: Weissman et al. disclose a method comprising:

a) accepting search query information including a word (col 13, lines 35-65 and Figs 3, 6-8);

b) determining one or more words related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

c) generating an item request including

i) the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8),, and

ii) the one or more words determined to be related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

d) retrieving items using the item request (col 13, lines 35-65 and Figs 3, 6-8); and

e) determining a score for each of the retrieved items, wherein a score component is adjusted for any items retrieved on the basis of the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query (col 8, lines 8-22 and col 9, lines 42-67); and

f) transmitting at least some of the retrieved items towards a client device for rendering to a user (col 10, lines 42-54).

Claims 47, 51-53 and 74 disclose the apparatus of the method Claims 1, 5-7 and 32 respectively; therefore, the prior art of Weissman et al. as set forth above is relied upon to reject Claims 47, 51-53 and 74.

Claim 84: The method of claim 1 wherein the act of retrieving ads using the ad request retrieves ads relevant to any one of the words of the generated ad request (col 13, lines 35-65 and Figs 3, 6-8).

Claim 85: The method of claim 7 wherein the act of retrieving ads using the ad request retrieves ads relevant to any one of the words of the generated ad request (col 13, lines 35-65 and Figs 3, 6-8).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 8, 9, 19-21, 33, 34 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman et al. (US 6,816,857).

Claims 8 and 33: Weissman et al. disclose the method of claims 7 and 32 but do not explicitly disclose wherein the act of adjusting the scores includes decreasing the scores. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of decreasing the score is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. to include a step of decreasing the score. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted (via a numerical increase or decrease of the updated score with reference to the "un-updated" score).

Claim 9: Weissman et al. disclose the method of claim 7 but do not explicitly disclose wherein the act of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. to include a step of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. One would

have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted.

Claim 19: Weissman et al. disclose a method comprising:

a) accepting search query information including a word (col 13, lines 35-65 and Figs 3, 6-8);

b) determining one or more words related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

c) generating an item request including

i) the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8), and

ii) the one or more words determined to be related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

d) retrieving items using the item request (col 13, lines 35-65 and Figs 3, 6-8);

e) determining a score for each of the retrieved items (col 8, lines 8-22 and col 9, lines 42-67); and

but does not explicitly disclose

f) adjusting the scores of any items retrieved solely on the basis of the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query to generate adjusted scores; and

g) serving at least some of the items to a client device for rendering to a user, wherein the serving is controlled, at least in part, using the adjusted scores (col 10, lines 42-54).

Weissman et al. disclose adjusting the score of any items retrieved on the basis of the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query (col 8, lines 8-22 and col 9, lines 42-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the adjusting being solely based on the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query since it was known in the art that different schemes of advertising utilizing an assortment of features are used to provide a specific scope in the targeted audience sought by the advertiser such as the criteria included in broadening and/or restricting the reach of the targeted advertisement in view of the search results.

Claim 20: Weissman et al. disclose the method of claim 19 but do not explicitly disclose wherein the act of adjusting the scores includes decreasing the scores. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of decreasing the score is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. to include a step of decreasing the score. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted (via a numerical increase or decrease of the updated score with reference to the "un-updated" score).

Claim 21: Weissman et al. disclose the method of claim 19 but do not explicitly disclose wherein the act of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. to include a step of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted.

Claim 34: Weissman et al. disclose the method of claim 32 but do not explicitly disclose wherein the act of adjusting the scores includes multiplying each of the score component by a multiplier that is less than one. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of adjusting the score component includes multiplying each of the scores by a multiplier that is less than one is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. to include a step of adjusting the score component includes multiplying each of the scores by a multiplier that is less than one. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted.

Claim 63: Weissman et al. disclose the apparatus of the method Claim 19; therefore, the prior art of Weissman et al. as set forth above is relied upon to reject Claim 63.

6. Claims 2-4, 10-13, 22-25, 31, 35-38, 48-50, 54-57, 64-67, 73, 75-78 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman et al. as applied to the claims above, and further in view of Dorosario et al. (2003/0078928).

Claim 2: Weissman et al. disclose the method of claim 1 but do not explicitly disclose wherein the act of determining one or more words related to the words included in the accepted search query includes using word-related word mapping information, and wherein the word-related word mapping information is based on query session word co-occurrence information. In an analogous art, Dorosario et al. disclose a co-queries feature in a search engine (page 5, parag. 47-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the co-occurance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 3: Weissman et al. and Dorosario et al. disclose the method of claim 2 wherein the word-related word mapping information includes weights (Weissman et al.: col 8, lines 8-22).

Claim 4: Weissman et al. and Dorosario et al. disclose the method of claim 3 but do not explicitly disclose wherein the each of the weights are determined using a probability that a word and a related word will co-occur in a given query session. In an analogous art, Dorosario et al. disclose a co-queries feature in a search engine and weighing factors (page 5, parag. 47-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the co-occurance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 10: Weissman et al. disclose the method of claim 9 but do not explicitly disclose further comprising:

h) updating the multiplier using performance information. Weissman disclose the feature of updating the score. In an analogous art, Dorosario et al. disclose a performance feature in a search engine and weighing factors (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 11: Weissman et al. and Dorosario et al. disclose the method of claim 10 wherein the items are ads (Weissman et al.: col 13, lines 35-65 and Figs 3, 6-8).

Claim 12: Weissman et al. and Dorosario et al. disclose the method of claim 11 but do not explicitly disclose wherein the performance information includes ad selection information. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 13: Weissman et al. and Dorosario et al. disclose the method of claim 11 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing

the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 22: Weissman et al. disclose the method of claim 21 but do not explicitly disclose further comprising:
g) updating the multiplier using performance information. In an analogous art, Dorosario et al. disclose a performance feature (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 23: Weissman et al. and Dorosario et al. disclose the method of claim 22 wherein the items are ads (Weissman et al.: col 13, lines 35-65 and Figs 3, 6-8).

Claim 24: Weissman et al. and Dorosario et al. disclose the method of claim 23 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et

al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 25: Weissman et al. and Dorosario et al. disclose the method of claim 23 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 31: Weissman et al. disclose a method comprising:

a) accepting search query information including a word (col 13, lines 35-65 and Figs 3, 6-8);

b) determining one or more words related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

c) automatically generating an item request including

i) the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8), and

ii) the one or more words determined to be related to the word included in the accepted search query (col 13, lines 35-65 and Figs 3, 6-8);

d) retrieving items using the item request (col 13, lines 35-65 and Figs 3, 6-8); and

e) transmitting at least some of the retrieved items towards a client device for rendering to a user (col 10, lines 42-54), but do not explicitly disclose

wherein the act of determining one or more words related to words included in the accepted search query includes using query session word co-occurrence information (page 3, parag. 28 and page 5, parag. 44). In an analogous art, Dorosario et al. disclose a co-queries feature in a search engine (page 5, parag. 47-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the co-occurance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 35: Weissman et al. disclose the method of claim 34 but do not explicitly disclose further comprising:

g) updating the multiplier using performance information (page 5, parag. 44 and page 7, parag. 63). In an analogous art, Dorosario et al. disclose a performance feature (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on

the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 36: Weissman et al. and Dorosario et al. disclose the method of claim 35 wherein the items are ads (Weissman et al.: col 13, lines 35-65).

Claim 37: Weissman et al. and Dorosario et al. disclose the method of claim 36 but do not explicitly disclose wherein the performance information includes ad selection information. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 38: Weissman et al. and Dorosario et al. disclose the method of claim 36 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et

al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claims 48-50 disclose the apparatus of the method Claims 2-4 respectively; therefore, the prior arts of Weissman et al. and Dorosario et al. as set forth above are relied upon to reject Claims 48-50.

Claim 54: Weissman et al. disclose the apparatus of claim 53 but do not explicitly disclose wherein the means for adjusting use a multiplier, the apparatus further comprising:
h) means for updating the multiplier using performance information (page 5, parag. 44 and page 6, parag. 63). In an analogous art, Dorosario et al. disclose a performance feature (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 55: Weissman et al. and Dorosario et al. disclose the apparatus of claim 54 wherein the items are ads (Weissman et al.: col 13, lines 35-65).

Claim 56: Weissman et al. and Dorosario et al. disclose the apparatus of claim 55 but do not explicitly disclose wherein the performance information includes ad selection information. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al. and Dorosario et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 57: Weissman et al. and Dorosario et al. disclose the apparatus of claim 55 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to apparatus the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 64: Weissman et al. disclose the apparatus of claim 63 wherein the means for adjusting uses a multiplier, the apparatus further comprising:

h) means for updating the multiplier using performance information (page 5, parag. 44 and page 7, parag. 63). In an analogous art, Dorosario et al. disclose a performance feature (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 65: Weissman et al. and Dorosario et al. disclose the apparatus of claim 64 wherein the items are ads (Weissman et al.: col 13, lines 35-65).

Claim 66: Weissman et al. and Dorosario et al. disclose the apparatus of claim 65 but do not explicitly disclose wherein the performance information includes ad selection information. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al. and Dorosario et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 67: Weissman et al. and Dorosario et al. disclose the apparatus of claim 65 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 73 discloses the apparatus of the method Claim 31; therefore, the prior art of Weissman et al. and Dorosario et al. as set forth above is relied upon to reject Claim 73.

Claim 75: Weissman et al. disclose the apparatus of claim 74 but do not explicitly disclose wherein the score component is adjusted using a multiplier, the apparatus further comprising: f) means for updating the multiplier using performance information. In an analogous art, Dorosario et al. disclose a performance feature (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al., with the performance feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the

semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 76: Weissman et al. and Dorosario et al. disclose the apparatus of claim 75 wherein the items are ads (Weissman et al.: col 13, lines 35-65).

Claim 77: Weissman et al. and Dorosario et al. disclose the apparatus of claim 76 but do not explicitly disclose wherein the performance information includes ad selection information. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus as taught by Weissman et al. and Dorosario et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the apparatus of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 78: Weissman et al. and Dorosario et al. disclose the apparatus of claim 76 but do not explicitly disclose wherein the performance information includes ad conversion information. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et

al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claim 86: Weissman et al. and Dorosario et al. disclose the method of claim 31 wherein the act of retrieving items using the item request retrieves items relevant to any one of the words of the generated item request (col 13, lines 35-65).

7. Claims 14-17, 26-29, 39-42, 58-61, 68-71, 79-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman et al. and Dorosario et al. as applied to the claims above, and further in view of Hosea et al. (2002/0059094).

Claim 14, 26 and 39: Weissman et al. and Dorosario et al. disclose the method of claims 10, 22 and 35 respectively but do not explicitly disclose wherein the act of updating the multiplier is performed using a function that causes the updated multiplier to converge to observed user behavior relevant to performance divided by predicted user behavior relevant to performance. In an analogous art, Hosea et al. teaches that it is known to use an adaptive profiling algorithm starting with an educated guess (the zip code of the user) and evolving as more information is available about the user (page 4, parag. 43 and 44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al. and Dorosario et al., with the adaptive profiling feature as taught by Hosea et al. One would have been motivated to modify the method with an adaptive profiling

algorithm for providing a more efficient targeted advertising strategy by incorporating pertinent information about the user thus increasing the effectiveness of ad matching.

Claims 15, 27 and 40: Weissman et al., Dorosario et al. and Hosea et al. disclose the method of claims 10, 22 and 35 respectively but do not explicitly disclose wherein the act of updating the multiplier is performed using the formula:
updated_multiplier = (N x initial multiplier + observed_user _behavior) / (N + naively_predicted _user _behavior)
wherein N is a number.
In an analogous art, Hosea et al. teaches that it is known to use an adaptive profiling algorithm starting with an educated guess (the zip code of the user) and evolving as more information is available about the user (page 4, parag. 43 and 44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., Dorosario et al. and Hosea et al., with the adaptive profiling feature as taught by Hosea et al. One would have been motivated to modify the method with an adaptive profiling algorithm for providing a more efficient targeted advertising strategy by incorporating a greater number of pertinent information about the user thus increasing the effectiveness of advertisement matching.

Claims 16, 28 and 41: Weissman et al., Dorosario et al. and Hosea et al. disclose the method of claim 15, 27 and 40 respectively but do not explicitly disclose wherein the user behavior is selection. In an analogous art, Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., Dorosario et al. and Hosea et al., with the ad selection feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claims 17, 29 and 42: Weissman et al., Dorosario et al. and Hosea et al. disclose the method of claim 15, 27 and 40 respectively but do not explicitly disclose wherein the user behavior is conversion. In an analogous art, Dorosario et al. disclose an ad conversion feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., Dorosario et al. and Hosea et al., with the ad conversion feature as taught by Dorosario et al. One would have been motivated to modify the method of Weisman et al. to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claims 58-61, 68-71 and 79-82 disclose the apparatus of the method Claims 14-17, 26-29 and 39-42 respectively; therefore, the prior arts of Weissman et al., Dorosario et al. and Hosea et al. as set forth above are relied upon to reject Claims 58-61, 68-71 and 79-82.

8. Claims 18, 30, 43, 62, 72 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman et al. as applied to the claims above, and further in view of McElfresh et al. (6,907,566).

Claims 18, 30 and 43: Weissman et al. disclose the method of claims 7, 19 and 32 respectively wherein the retrieved items are advertisements but does not explicitly disclose wherein the act of determining a score for each of the retrieved items uses at least one of ad performance information and ad price information. Weisman et al. disclose an adjustment based on pricing (fig 9). In an analogous art, McElfresh et al. teaches that it is known to track the performance of the ads displayed and further use the performance data as factors in a statistical model in targeted advertising (col 5, lines 66 to col 6, line 14; col 8, lines 15-28 and col 11, lines 34 to 67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the score adjustment feature based on ad performance information as taught by McElfresh et al. One would have been motivated to modify the method to increase the efficiency in the targeting of the advertisement by incorporating an adjustment based on the prior interaction of the users with the ads.

Claims 62, 72 and 83 disclose the apparatus of the method Claims 18, 30 and 43 respectively; therefore, the prior arts of Weissman et al. and McElfresh et al. as set forth above are relied upon to reject Claims 62, 72 and 83.

Response to Arguments

9. Applicant's arguments with respect to claims 1-14, 18-26, 30-39, 43, 47-58, 62-68 and 72-79 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 15-17, 27-29, 40-42, 59-61, 69-71 and 80-82, the applicant argues that the Hosea et al. reference do not teach the update-multiplier formula. The Examiner agrees that the Hosea et al. does not disclose the specific formula; however, Hosea et al. teach an example of an adaptive profiling algorithm that takes into consideration the behavior of the user over time starting from a pre-determined data. Thus, the formula of Hosea et al. is effectively similar to the applicant's formula.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri V. Nguyen whose telephone number is (571) 272-6965. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029 and Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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